

It is claimed:

1. A substantially purified nucleic acid molecule comprising a nucleotide sequence having between 90% and 100% sequence identity with a sequence selected from the group consisting of SEQ ID NOs: 7, 9, 11, 12, 13, 14, 15, 16, 17, 18 and complements thereof.

2. The substantially purified nucleic acid molecule of claim 1, wherein said nucleic acid molecule encodes a wheat protein or fragment of a wheat protein.

3. The substantially purified nucleic acid molecule of claim 1, wherein said nucleotide sequence is selected from the group consisting of SEQ ID NOs: 7, 9, 11, 12, 13, 14, 15, 16, 17 and 18.

4. The substantially purified nucleic acid molecule of claim 1, wherein said nucleotide sequence has between 95% and 100% sequence identity with a sequence selected from the group consisting of SEQ ID NOs: 7, 9, 11, 12, 13, 14, 15, 16, 17, 18 and complements thereof.

5. A substantially purified nucleic acid molecule consisting of a nucleotide sequence selected from the group consisting of SEQ ID NOs: 7, 9, 11, 12, 13, 14, 15, 16, 17, 18 and complements thereof.

6. A substantially purified nucleic acid molecule comprising a fragment from about 50 to about 100 nucleotide residues, wherein said fragment exhibits complete complementarity to a sequence selected from the group consisting of SEQ ID NOs: 7, 9, 11, 12, 13, 14, 15, 16, 17, 18 and complements thereof.

7. The substantially purified nucleic acid molecule of claim 6, where said nucleic acid molecule consists of said fragment.

8. The substantially purified nucleic acid molecule of claim 6, wherein said substantially purified nucleic acid molecule further comprises a region having a single nucleotide polymorphism.